REMARKS

Claims 1, 2, 6 and 7 stand rejected under § 102 on the basis of Kim (U.S. Patent No. 6,016,296). Further, claims 3-5, 8, 11 and 12 stand rejected under § 103 on the basis of Kim in view of Kuhn.

Applicants traverse this rejection because Kim does not disclose (or suggest) a decelerator that consumes power, or a decelerator that operates in two deceleration modes, as in the present invention. Kim describes an information storing device in which different reproduction speeds are selected so as to select a high speed or a lower speed according to the power available. When the available power changes enough, the device changes the rotating speed of the spindle motor. However, the speed of the spindle motor is not reduced by a decelerator that consumes power, as in the present invention. The decelerator of the present invention is simply not present in Kim in any form. Accordingly, withdrawal of this rejection, and the rejections of the dependent claims, is respectfully requested.

Claim 9 stands rejected under § 102 on the basis of Kuhn. Applicant amended claim 9 to recite, in part, "wherein said intermittent braking decelerator intermittently operates said brake to decelerate the rotation of said information recording medium, and subsequently continuously operates the brake to further decelerate the rotation of the information recording medium," and traverse.

Kuhn discloses an apparatus for braking a spindle motor in a disc playback system that can be carried out using one or more braking pulses. The length and number of

the braking pulses is determined by bit patterns stored in the ROM R1 which are based on results ascertained during test pulse braking. The comparison of the rotating speeds prior to and after a test braking impulse serve as a basis for determining the duration of the braking pulses. However, Kuhn does not intermittently decelerate the information recording medium and subsequently continuously operate the brake to further decelerate the rotation of the information recording medium, as required by claim 9. Kuhn does not realize the savings in power consumption that occurs when intermittent braking is followed by continuous braking. Nor is Kuhn concerned with such benefits. Kuhn merely brakes with a single pulse or a series of several braking pulses according to the pattern stored in the ROM R1 to ensure that the disk is stationary upon ejection, no matter what power consumption is required. Accordingly, withdrawal of this rejection is respectfully requested.

Applicants traverse the rejection of claim 11 under § 103 on the basis of Kim in view of Kuhn. Applicants submit that the references do not disclose or suggest "a brake for applying a brake force to said information recording medium to decelerate the rotation, wherein said signal controlling decelerator inputs the signal indicating the rotation speed lower than the rotation speed of said information recording medium to said driver to decelerate the rotation of the information recording medium, and subsequently operates said brake to further decelerate and stop the rotation of the information recording medium."

Kim does not disclose a brake for applying a brake force to the medium. Kim merely discloses accelerating or decelerating the rotating speed of the spindle motor during

reproduction to maintain the error correcting capability of a DSP. Thus, Kim does not disclose the use of a brake force subsequent to decelerating the rotation speed of the medium.

Further, while Kuhn discloses applying a braking force, Kuhn does not disclose using the driver to decelerate the rotation of the recording medium and subsequently applying a brake force to further decelerate and stop the rotation of the recording medium. While the Examiner asserts it would have been obvious to one of ordinary skill in the art to decelerate the rotation of the medium using a brake force subsequent to using the driver to decelerate the medium, Applicants assert that the use of a signal controlling decelerator that inputs a signal to the driver to decelerate the rotation of the medium, and which also subsequently operates the brake to decelerate and stop the medium is not disclosed or suggested by the references.

Neither reference discloses or suggests a signal controlling decelerator that both inputs the signal to the driver to decelerate and operates the brake to stop the disk because neither reference is directed to the same object as the present invention. Kim is concerned with adjusting the reproduction speed of the drive, while Kuhn is concerned with ensuring that the disk comes to a complete stop at ejection. Niether Kim nor Kuhn disclose or suggest that a signal controlling decelerator causes the driver to decelerate the medium followed by the brake to stop the medium, a technique which uses less power than the conventional eject operation. Further, even if Kim and Kuhn were combined, the result would not be the invention as claimed. The result of the combination of Kim and Kuhn

would merely be a disk drive having a driver which raises or lowers the rotation speed during reproduction, and a brake that is used during the ejection mode. This is not the same as the invention as recited in the claim, where a "signal controlling decelerator inputs the signal indicating the rotation speed lower than the rotation speed of said information recording medium to said driver to decelerate the rotation of the information recording medium, and subsequently operates said brake to further decelerate and stop the rotation of the information recording medium." Thus, Applicants assert that one of ordinary skill in the art would not have been motivated to combine the references to get the invention as claimed. Accordingly, withdrawal of this rejection, and the rejections of the dependent claims, is respectfully requested.

The rejection of the dependent claims 3-5, 8, and 12 is traversed for the reasons given for their respective independent claims.

For the foregoing reasons, Applicants believe that this case is in condition for allowance, which is respectfully requested. The Examiner should call Applicants' attorney if an interview would expedite prosecution.

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Respectfully submitted,

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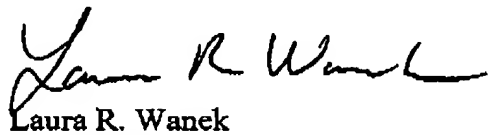
By 

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